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09/742,534	12/21/2000	Charles A. Eldering	T721-18	6855
27832	7590	11/02/2005	EXAMINER	
TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME 6206 KELLERS CHURCH ROAD PIPERSVILLE, PA 18947			SHELEHEDA, JAMES R	
			ART UNIT	PAPER NUMBER
			2617	
DATE MAILED: 11/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/742,534	ELDERING, CHARLES A.
	Examiner James Sheleheda	Art Unit 2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 31 August 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4-17,20,22-28,32-34,36,38-50 and 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,4,9-17,26-28,32,33,36,39,40 and 42-50 is/are rejected.
- 7) Claim(s) 5-8,20,22-25,34,38,41 and 52 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/3/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/31/05 has been entered.

### ***Claim Objections***

2. Claim 13 is objected to because of the following informalities:

In claim 13, line 29, "said subscriber group" should be changed to --a subscriber group--, as the limitation of a subscriber group has not yet been introduced in the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 39, 40, 49 and 50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The current invention is a system for transmitting video to a user wherein a plurality of presentation channels of programming are transmitted to the user's equipment (see specification at page 10, lines 2-7) **or** wherein a user requests a particular channel in a switched digital video network and the requested channel is transmitted to the user (see specification at page 10, lines 8-25 and page 20, lines 1-14).

The disclosure as originally filed fails to specifically disclose a system wherein a subscriber node will receive a plurality of presentation channels (as recited in claim 28, line 7-9 and claim 42, line 1-3) in a switched digital video system transmitting a presentation channel upon request to the subscriber node (as recited in claims 39 and 49), as receiving a specific presentation channel upon request in a switched digital video system is specifically presented as an alternative to receiving the plurality of presentation channels.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 16, 17 and 42-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "wherein each presentation channel is assigned to one of a plurality of subscriber groups" in lines 1 and 2. It is unclear if the limitation is referring to the previously introduced subscriber groups of claim 13, or is introducing a new group.

Further, claims 16 and 17, in lines 2 and 1, respectively, recite the limitation of "each subscriber group". It is unclear if "each subscriber group" is refers to the subscriber groups first introduced claim 13, claim 16 or both.

Claim 42 recites the limitation "each presentation channel corresponding to one of a plurality of programming channels" in lines 3 and 4. It is unclear exactly how the presentation channels correspond to the programming channels. More specifically, the claim language is ambiguous as to whether each of the plurality of presentation channels correspond to the same one programming channel, or if each presentation channel corresponds to one individual programming channel.

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 2, 4, 10-17, 28, 32, 33, 36, 39 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoarty et al. (Hoarty) (5,550,578) in view of Bar-el (WO 99/26415) (of record).

As to claim 1, Hoarty discloses a method of transmitting television programming and advertising from a headend to subscribers at a plurality of subscriber nodes (column 5, lines 48-64), said method comprising the steps of:

(b) receiving at least one programming channel of television programming (column 5, lines 48-64, column 7, lines 14-22 and lines 38-55);  
(c) forming from said at least one programming channel a plurality of presentation channels of television programming (forming a plurality of interactive channels for the requested interactive content; Fig. 10; column 8, lines 1-13, column 9, lines 52-67 and column 10, lines 22-37), the plurality of presentation channels having programming identical to said at least one programming channel (when subscribers request the same movie; column 10, lines 22-37 and column 12, lines 7-30).

While Hoarty discloses transmitting each of said presentation channels to at least those subscribers corresponding to said presentation channel (wherein all of the interactive channels are broadcast, but the subscriber may only tune to watch their own; Fig. 10, column 9, lines 52-63, column 12, lines 7-30 and column 14, lines 29-49), he fails to specifically disclose

(a) creating a plurality of subscriber groups, members of said subscriber groups being based on at least one characteristic of said subscriber relevant to advertising, wherein each presentation channel corresponds to one of the subscriber groups,

- (d) storing a plurality of advertisements for insertion into advertising avails in said presentation channels;
- (e) storing for each presentation channel a queue comprising an ordered list of advertisement resource locators (ARLs), said ARLs comprising a pointer to a location of a corresponding advertisement;
- (f) determining advertising avails in each of said presentation channels;
- (g) for each presentation channel, determining from said queue corresponding to said presentation channel an advertisement to be inserted in the advertising avails in said presentation channel; and

In an analogous art, Bar-el discloses a method of transmitting television programming and advertising from a headend to a plurality of subscriber nodes (page 7, lines 2-19), consisting of creating a plurality of subscriber groups (wherein subscribers are associated with a closest group profile; page 10, lines 14-20 and page 11, lines 14-19), members of said subscriber groups being based on at least one characteristic of said subscriber relevant to advertising (page 10, lines 14-20);

forming a plurality of presentation channels of television programming identical to said at least one programming channel (outputting separate identical video sequences for each requester; page 7, lines 20-24, page 8, lines 1-14 and page 23, lines 10-15), each presentation channel corresponding to a subscriber group (corresponding to the user making the request and their closest group; page 7, lines 20-24 and page 8, lines 11-15);

(d) storing a plurality of advertisements for insertion into advertising avails in said presentation channels (advertisement image sets to be inserted; page 11, lines 8-19);

(e) storing for each presentation channel a queue comprising an ordered list of advertisements (schedule based upon the personalization data for a particular video sequence; page 14, lines 14-21);

(f) determining advertising avails in each of said presentation channels (determining when, where and how to insert the advertisements into the video; page 14, lines 14-21 and page 13, lines 10-19);

(g) for each presentation channel, determining from said queue corresponding to said presentation channel an advertisement to be inserted in each avail in said presentation channel (inserting ads according to the predetermined schedule; page 14, lines 14-24 and page 15, lines 1-5);

(h) inserting said advertisement determined in step (g) into said corresponding avail (page 14, lines 14-24 and page 15, lines 1-5) for the typical benefits of providing personalized video advertisement based on knowledge of the individual user requesting the video (page 7, lines 1-10).

Additionally, while Hoarty and Bar-el discloses a queue comprising an ordered list of advertisements to be inserted (schedule based upon the personalization data for a particular video sequence; see Bar-el at page 14, lines 14-21), they fail to specifically disclose wherein said list comprises (ARLs) comprising a pointer to a location of a corresponding advertisement.

The examiner takes Official Notice that it was notoriously well known in the art to utilize pointers which indicate the location of corresponding data, instead of manipulating the data itself, for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in its entirety.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty's system to include

- (a) creating a plurality of subscriber groups, members of said subscriber groups being based on at least one characteristic of said subscriber relevant to advertising, wherein each presentation channel corresponds to one of the subscriber groups,
- (d) storing a plurality of advertisements for insertion into advertising avail in said presentation channels;
- (e) storing for each presentation channel a queue comprising an ordered list of advertisements;
- (f) determining advertising avail in each of said presentation channels;
- (g) for each presentation channel, determining from said queue corresponding to said presentation channel an advertisement to be inserted in the advertising avail in said presentation channel; and
- (h) inserting said advertisement determined in step (g) into said corresponding avail, as taught by Bar-el, for the typical benefit of providing a requested video with personalized advertisements based on knowledge of the individual user requesting the video.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty and Bar-el's system to include wherein said list comprises (ARLs) comprising a pointer to a location of a corresponding advertisement for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in it's entirety.

As to claim 2, Hoarty and Bar-el disclose wherein each subscriber group comprises a set of subscribers that is mutually exclusive of each other subscriber group (wherein each subscriber is set to the group profile which is closest to their own; see Bar-el at page 10, lines 14-20).

As to claim 4, Hoarty and Bar-el disclose assigning each subscriber to one or more of the subscriber groups (see Bar-el at page 10, lines 14-20).

As to claim 10, Hoarty and Bar-el disclose wherein said advertisements are stored in digital form (digital images to be inserted into a digital video stream; see Bar-el at page 11, lines 8-13 and 11-19).

As to claim 11, while Hoarty and Bar-el disclose wherein said advertisements are stored in digital form, they fail to specifically disclose wherein said advertisements are in MPEG form.

The examiner takes Official Notice that it was notoriously well known in the art to utilize the MPEG standard format when processing and storing digital video images for the typical benefits provided by compression, such as reducing storage and bandwidth needs, and the further benefit provided by conforming to a well known recognized standard.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty and Bar-el's system to include wherein said advertisements are in MPEG form for the typical benefits provided by compression, such as reducing storage and bandwidth needs, and the further benefit provided by conforming to a well known recognized standard.

As to claim 12, Hoarty and Bar-el disclose wherein said at least one programming channel and said presentation channels are in digital format (see Hoarty at column 8, lines 1-42).

As to claim 13, Hoarty discloses an apparatus for transmitting television programming and advertising from a headend of a communications system to a plurality of subscriber systems (column 5, lines 48-64), comprising:

a receiver for receiving a plurality of channels of television programming (column 5, lines 48-64, column 7, lines 14-22 and lines 38-55);  
a plurality of splitters (66, Fig. 6), each splitter coupled to receive one of said channels of television programming (receiving the information channels from the

information source; column 8, lines 1-6) and split said channel into a plurality of presentation channels (forming a plurality of interactive channels for the requested interactive content, of which subscribers can request the same content; Fig. 10; column 8, lines 1-13, column 9, lines 52-67, column 10, lines 22-37 and column 12, lines 7-30).

While Hoarty discloses a transmitter adapted to transmit each of said plurality of presentation channels to at least those subscribers in a subscriber group (consisting of the subscriber a their home) corresponding to said presentation channel (wherein all of the interactive channels are broadcast, but the subscriber may only tune to watch their own; Fig. 10, column 9, lines 52-63, column 12, lines 7-30 and column 14, lines 29-49), he fails to specifically disclose

a first memory for storing a plurality of advertisements for insertion into advertising availabilities in said presentation channels;

a second memory for storing for each presentation channel a queue comprising an ordered list of advertisement resource locators (ARLs), said ARLs comprising a pointer to a location of a corresponding advertisement;

a circuit for determining advertising availabilities in each of said presentation channels;

an advertisement management circuit coupled to said second memory and adapted to consult said queues to determine which advertisements are to be inserted in which availabilities in said presentation channels; and

an advertisement insertion circuit coupled to said presentation channels and adapted to insert said advertisement into said availabilities in accordance with the schedules as dictated by said queues.

In an analogous art, Bar-el discloses an apparatus for transmitting television programming and advertising from a headend of a communications system to a plurality of subscriber systems(Fig. 1), comprising:

receiving a channel of television programming and splitting said channel into a plurality of presentation channels (receiving a video and then outputting 2 identical streams to individual users; see Fig. 2 and page 11, lines 20-23 and page 12, lines 3-15);

a first memory (object storage unit, 22) storing a plurality of advertisements for insertion into advertising availabilities in said presentation channels (advertisement image sets to be inserted; page 11, lines 8-19);

a second memory (scheduler, 42) storing, for each presentation channel, a queue comprising an ordered list of advertisements (storing a previously prepared insertion schedule; page 14, lines 14-21);

a circuit for determining advertising availabilities in each of said presentation channels (determining when, where and how to insert the advertisements into the video; page 14, lines 14-21 and page 13, lines 10-19);

an advertisement management circuit (scheduler, 42) coupled to said second memory and adapted to consult said queues to determine which advertisements are to be inserted in which availabilities in said presentation channels (inserting ads according to the predetermined schedule; page 14, lines 14-24 and page 15, lines 1-5); and

an advertisement insertion circuit (mixer, 44) coupled to said presentation channels and adapted to insert said advertisement into said availabilities in accordance with

the schedules as dictated by said queues (page 14, lines 11-24, page 15, lines 1-5, page 15, lines 22-24 and page 16, lines 1-16) for the typical benefits of providing personalized video advertisement based on knowledge of the individual user requesting the video (page 7, lines 1-10).

Additionally, while Hoarty and Bar-el discloses a queue comprising an ordered list of advertisements to be inserted (schedule based upon the personalization data for a particular video sequence; see Bar-el at page 14, lines 14-21), they fail to specifically disclose wherein said list comprises (ARLs) comprising a pointer to a location of a corresponding advertisement.

The examiner takes Official Notice that it was notoriously well known in the art to utilize pointers which indicate the location of corresponding data, instead of manipulating the data itself, for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in its entirety.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty's system to include

a first memory for storing a plurality of advertisements for insertion into advertising availabilities in said presentation channels;

a second memory for storing for each presentation channel a queue comprising an ordered list of advertisements;

a circuit for determining advertising availabilities in each of said presentation channels;

an advertisement management circuit coupled to said second memory and adapted to consult said queues to determine which advertisements are to be inserted in which avails in said presentation channels; and

an advertisement insertion circuit coupled to said presentation channels and adapted to insert said advertisement into said avails in accordance with the schedules as dictated by said queues, as taught by Bar-el, for the typical benefit of providing a requested video with personalized advertisements based on knowledge of the individual user requesting the video.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty and Bar-el's system to include wherein said list comprises (ARLs) comprising a pointer to a location of a corresponding advertisement for the typical benefits of reducing memory and processor requirements by only manipulating location pointers instead of the data in its entirety.

As to claim 14, Hoarty and Bar-el disclose wherein said advertisement insertion circuit and said advertisement management circuit comprise digital circuits (wherein the circuits are digital circuits handling digital video sequences; see Bar-el at page 14, lines 8-24, page 15, lines 1-5, page 15, lines 22-24 and page 16, lines 1-16).

As to claim 15, while Hoarty and Bar-el disclose wherein said advertisement insertion circuit and said advertisement manage circuit comprise digital circuits, they fail to specifically disclose wherein the circuits comprise digital processors.

The examiner takes Official Notice that it was notoriously well known in the art to utilize digital processors to handle a plurality of tasks, as opposed to a dedicated digital circuit, for the typical benefit of reducing the space requirements in of a system by utilizing a digital processor to handle the tasks of a dedicated circuit.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty and Bar-el's system to include digital processors for the typical benefit of reducing the space requirements in of a system by utilizing a digital processor to handle the tasks of a dedicated circuit.

As to claim 16, Hoarty and Bar-el disclose wherein each presentation channel is assigned to one of a plurality of subscriber groups (assigned to the user making the request based upon their particular group; see Bar-el at page 7, lines 20-24 and page 8, lines 11-15), members of said subscriber groups being based on at least one characteristic of said subscriber relevant to advertising (see Bar-el at page 10, lines 14-20).

As to claim 17, Hoarty and Bar-el disclose wherein each subscriber group comprises a set of subscribers that is mutually exclusive of each other subscriber group (wherein each subscriber is set to the group profile which is closest to their own; see Bar-el at page 10, lines 14-20).

As to claim 28, while Hoarty discloses a method of receiving at a subscriber node at least one channel of television programming and advertising from a headend of a television service delivery system (column 5, lines 48-64), the method comprising the steps of:

- (a) assigning said subscriber node to a group (assigning the subscriber to a particular MMC and frequency; column 12, lines 7-29 and column 3, lines 8-23);
- (b) simultaneously transmitting a plurality of presentation channels via said television service delivery system to said subscriber node (wherein all of the interactive channels are broadcast, but the subscriber may only tune to watch their own; Fig. 10, column 9, lines 52-63, column 12, lines 7-30 and column 14, lines 29-49), the presentation channels corresponding to a programming channel (forming a plurality of interactive channels for the requested interactive content; Fig. 10; column 8, lines 1-13, column 9, lines 52-67 and column 10, lines 22-37), said programming channel comprising television programming (column 5, lines 48-64 and column 8, lines 28-32), wherein said plurality of presentation channels contain identical programming (when subscribers request the same content; column 10, lines 22-37 and column 12, lines 7-30);
- (c) storing at said subscriber node, data indicating one of the presentation channels that corresponds to said advertising group (column 10, lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49); and
- (d) based on said assigning, enabling said subscriber node to select, receive and cause to be displayed on a monitoring device (Fig. 8, user televisions) said one of the

presentation channels (column 10, lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49), he fails to specifically disclose an advertising group, wherein said programming channel comprises television programming and advertising avails and wherein said plurality of presentation channels contain identical programming and different advertising within said advertising avails.

In an analogous art, Bar-el discloses an method for transmitting television programming and advertising from a headend of a communications system to a plurality of subscriber systems (Fig. 1),

consisting of creating a plurality of advertising groups (wherein subscribers are associated with a closest group profile to pick advertisements; page 10, lines 14-20 and page 11, lines 14-19),

receiving a programming channel comprising television programming and advertising avails (video sequence with advertising insert locations; page 13, lines 10-19 and page 8, lines 4-10) and forming a plurality of presentation channels corresponding to said programming channel containing identical programming (Fig. 1; page 8, lines 11-14) and different advertising within said advertising avails (page 8, lines 4-14) for the typical benefits of providing personalized video advertisement based on knowledge of the individual user requesting the video (page 7, lines 1-10).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty's system to include an advertising group, wherein said programming channel comprises television programming and advertising avails and wherein said plurality of presentation channels contain identical programming

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and different advertising within said advertising avails, as taught by Bar-el, for the typical benefits of providing personalized video advertisement based on knowledge of the individual user requesting the video.

As to claim 32, Hoarty and Bar-el disclose wherein said data is received via said television service delivery system (see Hoarty at column 10, lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49).

As to claim 33, Hoarty and Bar-el disclose wherein said data is received in a dedicated channel of said television service delivery system (received over the frequency channel dedicated to the single user; see Hoarty at column 3, lines 8-18, column 10, lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49).

As to claim 36, Hoarty and Bar-el disclose wherein step (c) includes storing data indicating a frequency of said one of the presentation channels (see Hoarty at column 3, lines 8-18, column 10; lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49) and step (d) includes tuning to a particular frequency corresponding to said selected one of the presentation channels (see Hoarty at Fig. 18; column 3, lines 8-18, column 10, lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49).

As to claim 39, Hoarty and Bar-el discloses wherein said television service delivery system is a switched digital video system (see Hoarty at Figs. 6-8) that

transmits a particular presentation channel to said subscriber responsive to a request received from said subscriber node (see Hoarty at column 10, lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49) and wherein step (d) includes requesting one of said presentation channels when a user of said subscriber node chooses to view said programming channel (wherein a user requests interactive content and a particular channel is then assigned to the user; column 12, lines 7-30).

As to claim 42, Hoarty discloses an apparatus for receiving at a subscriber node (column 5, lines 48-64) a plurality of presentation channels of television programming and advertising from a headend of a television service delivery system (broadcast interactive channels; Fig. 10, column 9, lines 52-63, column 12, lines 7-30 and column 14, lines 29-49 and column 5, lines 48-64), each presentation channel corresponding to one of a plurality of programming channels (presentation channels to transmitting the received programming content to subscribers; Fig. 10; column 8, lines 1-13, column 9, lines 52-67 and column 10, lines 22-37), wherein each of the plurality of presentation channels corresponding to one of said programming channels comprises the same programming as the one of said programming channels (wherein the presentation channels are made up of the received programming content; column 8, lines 1-13, column 9, lines 52-67, column 10, lines 22-37 and column 12, lines 7-30), said apparatus comprising:

a memory at said subscriber node (inherently present to store control data indicating assigned descrambling and frequency tuning information; Figs. 8; column 3, lines 8-23, column 7, lines 27-31, column 12, lines 7-22 and column 14, lines 28-49);

an individual group map stored in said memory indicating, for each of said programming channels (for each of the possible information services that can be requested; column 7, lines 38-55 and column 12, lines 7-22), one of said corresponding presentation channels (indicating the frequency channel assigned to the user to receive the requested programming; column 3, lines 8-23 and column 12, lines 7-22);

a circuit for enabling said subscriber node to select the one of said presentation channels dictated by said individual group map responsive to an instruction selecting a programming channel for viewing (tuning to the proper frequency when a request is made and a frequency is assigned; column 3, lines 8-23, column 12, lines 7-22 and column 17, lines 8-33); and

a circuit for causing said selected presentation channel to be displayed on a monitoring device (Fig. 27; column 12, lines 7-22 and column 17, lines 8-33). While Hoarty discloses wherein the presentation channels have identical content (when subscribers request the same content; column 10, lines 22-37 and column 12, lines 7-30), he fails to specifically disclose presentation channels having identical programming content and different advertisements.

In an analogous art, Bar-el discloses a system for transmitting television programming and advertising from a headend of a communications system to a plurality of subscriber systems (Fig. 1),

receiving a programming channel comprising television programming and advertising avail (video sequence with advertising insert locations; page 13, lines 10-19 and page 8, lines 4-10) and forming a plurality of presentation channels corresponding to said programming channel containing identical programming (Fig. 1; page 8, lines 11-14) and different advertising within said advertising avail (page 8, lines 4-14) for the typical benefits of providing personalized video advertisement based on knowledge of the individual user requesting the video (page 7, lines 1-10).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty's system to include presentation channels having identical programming content and different advertisements, as taught by Bar-el, for the typical benefits of providing personalized video advertisement based on knowledge of the individual user requesting the video.

As to claim 43, Hoarty and Bar-el disclose wherein each of said programming channels comprises television programming and advertising avail (video sequence with advertising insert locations; see Bar-el at page 13, lines 10-19 and page 8, lines 4-10) and each of said presentation channels corresponding to one of said programming channels contains identical programming as the one of said programming channels (see Bar-el at Fig. 1; page 8, lines 11-14) and different advertising within said advertising avail (see Bar-el at page 8, lines 4-14).

As to claim 44, Hoarty and Bar-el disclose a circuit for receiving data via said television service delivery system from which said individual advertising group map can be created (receiving data informing the subscriber which frequency they've been assigned; column 3, lines 8-23, column 10, lines 22-37, column 12, lines 7-30, column 14, lines 29-49 and column 12, lines 7-22 and column 17, lines 8-33); and

a circuit for generating said individual advertising group map from said received data (utilizing the received data to tune and receive the correct channel; column 3, lines 8-23, column 10, lines 22-37, column 12, lines 7-30, column 14, lines 29-49 and column 12, lines 7-22 and column 17, lines 8-33).

As to claim 45, Hoarty and Bar-el disclose wherein circuit for receiving comprises circuitry for receiving said data in a dedicated channel of said television service delivery system (received over the frequency channel dedicated to the single user; see Hoarty at column 3, lines 8-18, column 10, lines 22-37 and column 12, lines 7-30 and column 14, lines 29-49).

9. Claims 9, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoarty and Bar-el as applied to claims 1 and 13 above, and further in view of Safadi (6,487,721) (of record).

As to claims 9 and 26, while Hoarty and Bar-el disclose wherein said programming channel includes avails, they fail to specifically disclose wherein said

programming channel includes indicators that identify the start of an avail and detecting said indicators.

In an analogous art, Safadi discloses a video server (Fig. 2) which detects indicators (cue commands) that identify the start of an ad avail (commercial insertion point; column 9, lines 13-25) in a program channel (column 4, lines 30-55 and column 9, lines 13-25) and wherein advertisements are then inserted into the detected avail (column 9, lines 13-25) for the typical benefit of allowing advertisements to be inserted into specific locations designated by a content provider (column 1, lines 26-42).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty and Bar-el's system to include the wherein said programming channel includes indicators that identify the start of an avail and detecting said indicators, as taught by Safadi, for the typical benefit of allowing content providers to specifically indicate where advertisements are to be inserted.

As to claim 27, while Hoarty and Bar-el disclose wherein said advertisement insertion circuit comprises a mixer, they fail to specifically disclose wherein said advertisement insertion circuit comprises a video switch.

In an analogous art, Safadi discloses a video server (Fig. 2) which detects indicators (cue commands) that identify the start of an ad avail (commercial insertion point; column 9, lines 13-25) in a program channel (column 4, lines 30-55 and column 9, lines 13-25) and wherein advertisements are then inserted into the detected avail (column 9, lines 13-25) by a video switch (splicer, 450) by splicing between a

commercial and the programming stream for the typical benefit of allowing traditional advertisements to replace specific locations of the program stream designated by a content provider (column 1, lines 26-42).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Hoarty and Bar-el's system to include the wherein said advertisement insertion circuit comprises a video switch, as taught by Safadi, for the typical benefit of allowing the insertion of traditional advertisements which replace part of the program stream.

#### ***Response to Arguments***

10. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

a. On pages 16 and 17, applicant request evidence supporting the Official Notice taken in regards to utilizing a queue to indicate the order in which actions are to be performed.

In response, applicant is directed to the claim rejections above and further to the previous Non-Final action, mailed 03/21/05, wherein it is clearly indicated that the Bar-el reference of record discloses the use of a queue of advertisements.

Further, applicant is again directed to Doherty (US2003/0200128A1) and Guyot (6,119,098), both of record, which were both specifically cited to applicant

in the previous Office Action as pertinent, as they both utilize queues of advertisements.

b. In response to applicant's arguments on pages 16 and 17, in regards to the Official Notice taken in regards to utilizing pointers, applicant is directed to the previous action wherein the use of pointers in this regard was entered into the record as fact as applicant had not made any attempt to traverse the Official Notice. Applicant's current traversal is not timely.

#### ***Allowable Subject Matter***

11. Claims 5-8, 20, 22-25, 34, 38, 41 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 46-48 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

13. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually

depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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P.O. Box 1450  
Alexandria, VA 22313-1450

on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

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Signature: \_\_\_\_\_

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I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. ( ) \_\_\_\_ - \_\_\_\_\_ on \_\_\_\_\_.  
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Signature: \_\_\_\_\_

Registration Number: \_\_\_\_\_

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda  
Patent Examiner  
Art Unit 2617

JS



VIVEK SRIVASTAVA  
PRIMARY EXAMINER